



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Vacuum gate valve, Series 121, DN 160 (ID 6")
Ordering No. 12144-PA44

Description

Flange	ISO-F 160
Actuator	Pneumatic, double acting <ul style="list-style-type: none">– with solenoid valve– with position indicator
Feedthrough	Shaft feedthrough

Technical data

Leak rate	<ul style="list-style-type: none">– Valve body– Valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹ $< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-7}$ mbar to 1.6 bar (abs)
Differential pressure on the gate		≤ 1.6 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		6 000 ls ⁻¹
Cycles until first service		100 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	<ul style="list-style-type: none">– Valve body– Actuator– Solenoid valve– Position indicator	≤ 120 °C ≤ 80 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		30 °C h ⁻¹
Material	<ul style="list-style-type: none">– Valve body– Mechanism	EN AC-42100 (3.2371) EN AW-6082 (3.2315)
Seal	<ul style="list-style-type: none">– Bonnet– Gate– Actuator	FKM (Viton®) FKM (Viton®), O-ring FKM (Viton®), NBR (BUNA N®)
Mounting position		any
Volume of pneumatic actuator		0.5 l / 0.018 ft ³
Compressed air min. – max. overpressure		4–7 bar / 58–102 psi
Compressed air connection		G 1/8" (1/8" NPT for USA)
Actuation time	<ul style="list-style-type: none">– closing– opening	2.0 s 2.0 s
Weight		8.6 kg / 29 lbs

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Behavior in case of compressed
air pressure drop

- Valve closed
- Valve open

- valve remains closed
- undefined

Behavior in case of power failure

- Valve closed
- Valve open

- valve remains closed
- valve closes

Electrical connections

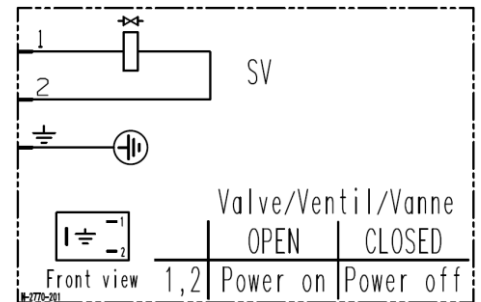
Solenoid valve

Type

4/2 way

Voltage

Defined by order



Wiring diagram

Position indicator

Type

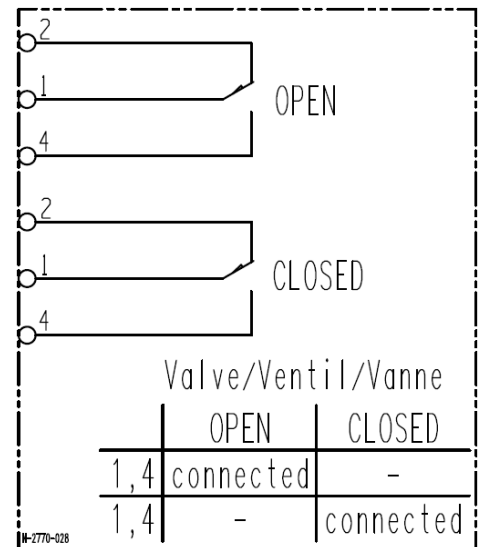
Micro Switch

Voltage

≤ 250 V AC ≤ 50 V DC

Current max.

≤ 2.0 A ≤ 1.2 A



Wiring diagram